

## REMARKS

Reconsideration of this application as amended is respectfully requested. Claims 1-16 were pending. Claims 1-16 stand rejected.

In this response, no claim has been canceled. Claims 1 and 3-9 have been amended. In addition, new claims 17-20 have been added. Thus, claims 1-20 remain pending. No new matter has been added. Reconsideration of this application as amended is respectfully requested.

Claims 1-3, 6-16 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,191,415 of Stridsberg ("Stridsberg"). It is respectfully submitted that claims 1-20 include limitations that are not disclosed by Stridsberg. Specifically, independent claim 1 recites as follows:

1. A system, comprising:
  - a rotating shaft having shaft movement parameters;
  - an incremental shaft encoder coupled to the rotating shaft to convert the shaft movement parameters of the rotating shaft into differentially encoded electrical signals suitable for processing;
  - an electrical-to-optical (E/O) converter coupled to the incremental shaft encoder to convert the differentially encoded electrical signals into optical signals;
  - a plurality of optical conductors to carry the optical signals; and
  - an optical-to-electrical (O/E) converter to receive the optical signals from the optical conductors and convert the optical signals back into electrical signals.

(Emphasis added)

Independent claim 1 includes an incremental shaft encoder to convert the shaft movement parameters into differentially encoded electrical signals and an electrical-to-optical (E/O) converter to convert the differentially encoded electrical signals to optical signals. Applicant respectfully submits that the above limitations are absent from Stridsberg.

Although Stridsberg discloses an incremental transducer to provide angular position information, Stridsberg fails to disclose that the incremental transducer is able to convert the position data into a differentially encoded electrical signal (see, col. 1, lines 53 to 61). There is no mention of converting movement parameters into differentially encoded signals in Stridsberg.

In addition, Stridsberg fails to disclose an electrical-to-optical converter to convert the differentially encoded electrical signals to optical signals. Although Stridsberg suggests that, "in an extreme case, a sophisticated data compression can run its own clock and mix all output data and clock to a self clocking single channel data stream that possibly can be transmitted on a optical fibre", such a suggestion fails to enable one with ordinary skill in the art to understand how the implementation be carried out. Applicant respectfully submits that such a suggestion still fails to read on an electrical-to-optical converter that converts the differentially encoded electrical signals to optical signals.

Furthermore, Stridsberg also fails to disclose or suggest an optical-to-electrical converter to convert the optical signals back to the electrical signals on other end of the optical conductors. Therefore, for the reasons discussed above, independent claim 1 is not anticipated by Stridsberg.

Similarly, independent claims 10 and 17 include limitations similar to those discussed above. Thus, for the reasons similar to those discussed above, it is respectfully submitted that independent claims 10 and 17 are not anticipated by Stridsberg.

Given that claims 2-9, 11-16 and 18-20 depend from one of the above independent claims, for the reasons similar to those discussed above, it is respectfully submitted that claims 2-9, 11-16 and 18-20 are not anticipated by Stridsberg. Withdrawal of the rejections is respectfully requested.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stridsberg. Claims 4 and 5 depend from claim 1. In view of the foregoing remarks, at least for the

reasons similar to those discussed above, it is respectfully submitted that claims 4-5 are patentable over Stridsberg. Withdrawal of the rejections is respectfully requested.

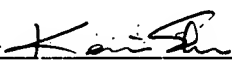
In view of the foregoing, Applicant respectfully submits the present application is now in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call the undersigned attorney at (408) 720-8300.

Please charge Deposit Account No. 02-2666 for any shortage of fees in connection with this response.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

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Kevin G. Shao  
Attorney for Applicant  
Reg. No. 45,095

12400 Wilshire Boulevard  
Seventh Floor  
Los Angeles, California 90025-1026  
(408) 720-8300